CURSORS

**PROBLEM #1**

**Program to display total hours worked by each employee:**

set serveroutput on

DECLARE

e\_name paydata1.name%type;

e\_id paydata1.IDNO%type;

w\_hrs paytran1.HOURSWK%type;

total\_hrs paytran1.HOURSWK%type;

CURSOR paydata\_cursor is

select name, idno from paydata1

order by idno;

CURSOR paytran\_cursor is

select HOURSWK from paytran1

where e\_id = idno

order by idno;

BEGIN

OPEN paydata\_cursor;

FETCH paydata\_cursor into e\_name, e\_id;

WHILE paydata\_cursor%FOUND LOOP

OPEN paytran\_cursor;

total\_hrs := 0;

FETCH paytran\_cursor into w\_hrs;

WHILE paytran\_cursor%FOUND LOOP

total\_hrs := total\_hrs + w\_hrs;

FETCH paytran\_cursor into w\_hrs;

END LOOP;

dbms\_output.put\_line(e\_id ||' ' || e\_name || ' ' || total\_hrs);

CLOSE paytran\_cursor;

FETCH paydata\_cursor into e\_name, e\_id;

END LOOP:

CLOSE paydata\_cursor;

end;

/

set serveroutput off

SQL> @ trans

**Total-hrs**

1111 Ann French **45**

2222 Robert Costa **61**

3333 Linda Ames **40**

4444 Scott Brooks **43**

5555 Susan Ash **40**

6666 James Smith **44**

7777 Mary Jones **45**

8888 John Morse **40**

PL/SQL procedure successfully completed.

**PROBLEM #2**

**Program to display salaries of salaried workers.**

set serveroutput on

declare

e\_name paydata1.name%type;

e\_id paydata1.IDNO%type;

e\_salary paydata1.salary%type;

salary\_per\_week paydata1.salary%type;

job\_code paydata1.jobcode%type;

cursor paydata\_cursor is

select name, idno, salary,jobcode from paydata1

where JOBCODE = 'S'

order by idno;

begin

open paydata\_cursor;

fetch paydata\_cursor into e\_name, e\_id, e\_salary, job\_code;

while paydata\_cursor%FOUND LOOP

salary\_per\_week := e\_salary/52;

dbms\_output.put\_line(e\_id ||' ' || e\_name||' '||job\_code||' '||e\_salary ||' ' || salary\_per\_week );

fetch paydata\_cursor into e\_name, e\_id, e\_salary, job\_code;

end loop;

close paydata\_cursor;

end;

/

SQL> @ trans1

1111 Ann French S 75000 **1442.31**

4444 Scott Brooks S 78000 **1500**

5555 Susan Ash S 57000 **1096.15**

6666 James Smith S 55000 **1057.69**

PL/SQL procedure successfully completed.

**PROBLEM #3**

**Program to display salaries of hourly workers with calculated overtime.**

set serveroutput on

DECLARE

e\_name paydata1.name%type;

e\_id paydata1.IDNO%type;

e\_salary paydata1.salary%type;

pay\_hr paydata1.payhr%type;

job\_code paydata1.jobcode%type;

**w\_hrs** paytran1.HOURSWK%type;

**total\_hrs** paytran1.HOURSWK%type;

**over\_time\_hrs** paytran1.HOURSWK%type;

CURSOR paydata\_cursor is

select name, idno, payhr, jobcode from paydata1

where jobcode ='H'

order by idno;

CURSOR paytran\_cursor is

select HOURSWK from paytran1

where e\_id = idno

order by idno;

BEGIN

OPEN paydata\_cursor;

FETCH paydata\_cursor into e\_name, e\_id, pay\_hr, job\_code;

**WHILE** paydata\_cursor%FOUND LOOP

OPEN paytran\_cursor;

total\_hrs := 0;

FETCH paytran\_cursor into w\_hrs;

**WHILE** paytran\_cursor%FOUND LOOP

total\_hrs := total\_hrs + w\_hrs;

FETCH paytran\_cursor into w\_hrs;

END LOOP;

**IF** total\_hrs > 40 then

over\_time\_hrs := total\_hrs - 40;

**ELSE**

over\_time\_hrs := 0;

end if;

**IF** over\_time\_hrs >0 then

**e\_salary := total\_hrs \* pay\_hr + over\_time\_hrs\*(pay\_hr \*1.5);**

**ELSE**

**e\_salary := total\_hrs \* pay\_hr;**

END IF;

dbms\_output.put\_line(e\_id ||' ' || e\_name ||' '|| job\_code||' ' || e\_salary|| ' ' || total\_hrs||' '||over\_time\_hrs);

CLOSE paytran\_cursor;

FETCH paydata\_cursor into e\_name, e\_id, pay\_hr, job\_code;

END LOOP;

CLOSE paydata\_cursor;

end;

/

set serveroutput off

**SQL> @ trans2**

**Salary total\_hrs Over\_time**

2222 Robert Costa H 4162.5 61 21

3333 Linda Ames H 2000 40 0

7777 Mary Jones H 1890 45 5

8888 John Morse H 1560 40 0

**PL/SQL procedure successfully completed.**